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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,696	01/11/2002	Carolyn Zelek	FMC 1361 PUSP / 201-0240	7703
28395	7590	03/17/2006	EXAMINER	
BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			KRISCIUNAS, LINDA MARY	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/043,696	<b>Applicant(s)</b> ZELEK ET AL.	
	<b>Examiner</b> Linda Krisciunas	<b>Art Unit</b> 3623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/21/02 &amp; 1/11/02</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The following is a Non-Final Office Action in response to the application submitted January 11, 2002. Claims 1-21 are pending.

#### ***Claim Objections***

2. Claim 10 is objected to because of the following informalities: Line 33 on page 40 states "factor x and at least on". This has been read as "factor x and at least one". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 8-12 and 14-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bovarnick et al (US 6,704,015).

As per claims 1, 9, 14 and 20, Bovarnick teaches identifying at least one aspect of a product that is critical to customer satisfaction and a target value for at least one aspect (column 4, lines 1-21, where sales is one listed critical criteria for customer satisfaction and as per Figure 1B has values of either low, medium or high impact associated with it.); characterizing the at least one aspect in terms of at least one

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contributing factor, and characterizing the at least one contributing factor in terms of at least one control factor (See Figure 1B where the sales criteria is broken into flexibility, knowledge responsiveness and value added services. Each of these has an impact value associated with it which is equivalent to a control factor as it performs an identical function in substantially the same manner with substantially the same results.); and adjusting nominal design values for the at least one control factor such that variability in the at least one contributing factor is minimized and the target value for the at least one aspect is attained (column 28, lines 16-43, where the data that is measured is entered into the system and there are control limits on the values and if these limits are exceeded the data is corrected or the chart definition is changed.).

As per claims 2 and 16, Bovarnick teaches at least one contributing factor is characterized in terms of the at least one control factor based on a transfer function  $y=f(x)$  (See Figure 5E and 5F and column 8, lines 19-45, where the data is plotted on a graph which contains x and y axis and therefore the data on this graph would follow the formula  $y=f(x)$ .).

As per claims 3, 10, 17 and 21, Bovarnick teaches the one contributing factor is additionally characterized in terms of at least one contributing noise factor and a transfer function  $y=f(x,n)$  (See figure 5E and 5F where the noise factor is captured by the control charts associated with the data. As noted in Figure 5F the data is plotted and then the control limits are plotted above and below the nominal value to provide a range of acceptable data values. These limits minimize any noise within their boundaries and focus attention on values above or below the limits.).

As per claim 4, Bovarnick teaches at least one aspect and target value for the at least one aspect are identified based on consumer insight (column 4, lines 59-62, where the items identified as critical to quality from the perspective of customer satisfaction with financial performance are illustrated in Figures 1D and 1E.).

As per claim 5, Bovarnick teaches identifying a target value for the at least one aspect in an aged condition (column 17, lines 48-65, where aged condition is interpreted as historical data and historical data is kept for a certain length of time and then purged.); and minimizing variability in the at least one contributing factor such that the target value for the at least one aspect in the aged condition is attained (column 28, lines 16-43, where the data that is measured is entered into the system and there are control limits on the values and if these limits are exceeded the data is corrected or the chart definition is changed).

As per claims 6, 12 and 18, Bovarnick teaches minimizing variability in the at least one contributing factor by reducing variability in the at least one control factor (See Figure 1D where the control factors have associated measurements of Op expenses and \$

Losses which would control the variability of it's associated control factor of "informative" as these items help to define and determine relative "informative-ness").

As per claims 8 and 19, Bovarnick teaches assessing the extent to which the target value is attained over the product life (column 17, lines 47-51, where historical data is maintained until it is not required and then it is purged. The saving of historical

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data is equivalent to attaining values over the product life as it performs an identical function in substantially the same manner with substantially the same results.).

As per claims 11 and 15, Bovarnick teaches the variability in the contributing factor is reduced in response to input adjusting the nominal design value(s) for the at least one control factor (column 28, lines 16-43, where the data that is measured is entered into the system and there are control limits on the values and if these limits are exceeded the data is corrected or the chart definition is changed).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bovarnick in view of Van Wyk et al (US 5,581,466).

As per claims 7 and 13, Bovarnick does not explicitly teach six sigma. Van Wyk teaches that it is known that the variability in the at least one contributing factor is reduced to a 6 sigma level (column 2, lines 28-41, where six sigma tolerances and analysis are calculated). Van Wyk is an analogous art as it also teaches about quality control and measurement. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the quality system of Bovarnick with the six sigma feature of Van Wyk to provide a more rigorous system for measurement.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art also teaches quality control and measurement: Ostrowski et al (US 6,377,908), Winn (US 5,731,572), Martin et al (US 6,253,115), Wakeman et al (US 6,353,767), Loman et al (US 6,571,202), Newmark (US 6,631,305), and Ali et al (US 6,405,344).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linda Krisciunas whose telephone number is 571-272-6931. The examiner can normally be reached on Monday through Friday, 6:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMK

*LMK*  
*March 13, 2006*



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